



Promoting Accountability of Public Resources

PERFORMANCE AUDIT REPORT ON ADEQUATE PROCUREMENT AND DISTRIBUTION OF MEDICAL SUPPLIES



June 2022

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Auditor General, R. L.**

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Abbreviations and glossary of terms

Abbreviations	Meaning
CMS	Central Medicine Store
GOL	Government of Liberia
GAC	General Auditing Commission
MOH	Ministry of Health
NDS	National Drugs Service
FEFO	First Expire First Out
SCPM	Supply Chain Management Plan
SCMU	Supply Chain Management Unit
SOP	Standard Operation Procedure
ISSAI	International Standard of Supreme Audit Institutions
INTOSAI	International Organization of Supreme Audit Institutions
STG	Standard Treatment Guideline
ELMIS	Electronic Logistic Management Information System
LMIS	Logistic Management System

Glossary of terms

Specification	Types or kinds of drugs or medicine
Quantification	Quantity or number of drugs or medicine
Distribution	To supply drugs or medicines to health facilities
Procurement	To purchase medicines or drugs
Medical Supplies	Drugs or medicines, gloves and pharmaceuticals
Health Facilities	Hospitals, Medical Centers, Depots and Clinics
Essential Drugs	Frequently used drugs or medicines (Paracetamol, ASA among others)
Pragmatic Drugs	drugs or medicines not frequently used (HIV Aids, TB, etc..)
Purposive sampling	Having or done with a purpose; serving or effecting a useful function though not as a result of planning or design
Stratified	Divided into levels or classes based on social status; formed or arranged into strata or layers



TRANSMITTER LETTER

The Honorable Speaker of the House of Representatives and Honorable President Pro-Tempore of the House of Senate.

We have undertaken a Performance Audit on the Adequate Procurement of Medical Suppliers/Drugs in Liberia for the fiscal years 2016 to 2019. This audit was conducted in line with the Auditor General's statutory mandate as enshrined under Section 2.1.3 of the GAC Act of 2014.

The audit was conducted in line with the International Organization of Supreme Audit Institutions (INTOSAI), Performance Auditing Standards and Guidelines as enshrined in the Performance Audit Manual. The Act that created the Ministry of Health was also used as a baseline for the evaluation of the performance of the Procurement Unit.

As indicated in the methodology segment of this report, all findings conveyed in the report were formally communicated to the Management of the Ministry of Health for their responses. Where responses were provided, they were evaluated and incorporated in this report. We are therefore thankful to the auditee (MOH) for assisting the audit team in completing the audit.

The team will carry out **Follow-Up** at an appropriate time in the future regarding actions taken in relation to the recommendations in this report.

We ask that you pay particular attention to the following matters that if implemented, will significantly improve the procurement of medical supplies/drugs in the country.

Ensure that Procurement of medical supplies be carried out on a quarterly basis and the GOL should put in place a mechanism that will facilitate timely provision of fund.

Ensure that Data clerks are assigned to health facilities around the country.

Ensure that personnel assigned at CMS be trained and qualified in the requirements of product identification, the detection and the avoidance of counterfeit/expired medical supplies/drugs entering the supply chain.

Ensure that drugs are made available on a quarterly basis to all health facilities

Medical supplies/drugs should be transported in accordance with prescribed procedures.

Ensure that regular (monthly or biannual) physical inventory (FEFO) is taken to avoid the distribution of expired drugs.

Ensure an effective follow-up program to evaluate the inventory report and the records of any corrective actions taken.

CMS/county depots should ensure that Medical supplies/drugs distributed to health facilities are inline with health facilities' requests.

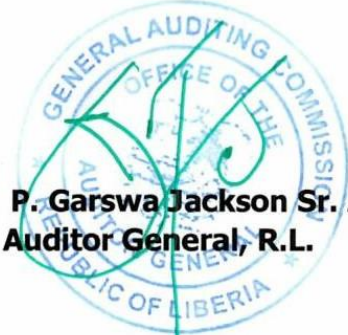
MOH should ensure that all storage at health facilities meet up with the required storage practises.

The Ministry of Health should provide temperature monitors at all storage facilities, especially in areas that are most likely to experience fluctuation of power supplied.

A mechanism to assess the national procurement and distribution system should be established to ensure proper coordination between GOL and the donor community during the procurement of essential and pragmatic drugs.

Establishment of an automated inventory system that will automatically signal when a particular medical supplie/drug is nearing expiration or has expired. This system should support the parking of the drugs in the order of FIRST EXPIRE FIRST OUT (FEFO).

Given the significance of the matters raised in this report, we urge the Honorable Speaker and the Members of the House of Representatives and Honorable Pro-Tempore and Members of the Liberian Senate to consider the implementation of the recommendations conveyed herein with urgency.

The seal of the General Auditing Commission of the Republic of Liberia is circular, featuring a central emblem with a scale of justice and a sword, surrounded by the text "GENERAL AUDITING COMMISSION OF THE REPUBLIC OF LIBERIA".
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Auditor General, R.L.

Monrovia, Liberia

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Executive Summary

Background of the Audit

Adequate procurement and distribution of medical supplies/drugs is focused on how effectively and efficiently medical supplies/drugs are procured and distributed to the various health facilities in Liberia by the Ministry of Health. Procurement and distribution are important parts of efficient drug management and supply and is critical to all levels of health care institutions. An effective procurement and distribution process ensures the availability of the right drugs in the right quantities, available at the right time, for the right patient at reasonable prices, and at recognizable standards of quality.

The Ministry of Health procures medical supplies/drugs through the Procurement Unit at the Ministry, while Central Medical Store (CMS) is responsible to store and distribute medical supplies to the various health centers and facilities.

The Government of Liberia spent over Six Million United States Dollars for the procurement and distribution of medical supplies/essential drugs from 2016 to 2019¹. In addition, Non-Governmental Organisations (NGOs) namely; Global Fund, USAID and UNICEF provided resources for technical assistance to the Ministry of Health in 2010 for the development of a 10-year Supply Chain Master Plan (SCMP). This served as the roadmap and foundation for supply chain improvements for medical supplies in Liberia.

In spite of the Government of Liberia's (GoL) and donors, partners' inputs, there are alarming public outcries concerning the inadequate procurement and distribution of medical supplies/drugs at the various health centres, hospitals and clinics around the country. This has led to citizens' purchasing medicines from street sellers with or without prescription, a process that is considered unhealthy.

Due to the social and economic impact the procurement and distribution of medical supplies/essential drugs has on the citizens and in adherence to the AG's mandate under Section 2.1.3 of the General Auditing Commission Act of 2014, the Auditor General commissioned a Performance Audit on the Procurement and Distribution of Medical Supplies in Liberia.

Objective and Scope of the Audit

The main objective of the audit is to assess whether the Ministry of Health (MoH) has mechanisms in place to ensure adequate procurement and distribution of medical supplies and the constant availability of drugs and medical supplies to medical facilities in Liberia. The audit covered three financial years 2016/17, 2017/18, 2018/19 and four counties out of the fifteen were selected for data collection.

Methods Used in Gathering Audit Evidence

The audit was conducted in accordance with the International Standards of Supreme Audit Institutions (ISSAI 3000) Performance Audit Standard, as well as relevant SAI Standards and guidelines applicable to performance audit. We gathered audit evidence through documents review, interviews and physical verification/observations.

¹ National budget from 2016 to 2019

Assessment Criteria

The audit assessed the procurement and distribution of medical supplies/drugs against criteria drawn from the National Health Policy on Medical Supplies, the Ministry of Health Procurement Standard Operation Procedure (SOP), the Liberian Integrated Distribution System Technical Report and the Central Medical Store warehouse SOP.

Summary of Audit Findings

The Government, through the Ministry of Health with the aid of the International community, put in place some mechanism to ensure that procurement and distribution of medical supplies/drugs is effective and efficient in Liberia. Despite these measures, the audit revealed the following:

Delay in the Procurement of Medical Supplies

The procurement of medical supplies did not meet the MOH's Procurement time frame set in the SOP which states that, "procurement of high value drugs should be done in the period of 2 to 4 months and 14 working days for drugs that worth USD \$ 200,000 or above". This is due to delay in funding by GOL to the MOH.

Limited Medical Supplies at Health Center

We observed that there were limited medical supplies / medicines at facilities' store rooms or storages. Accordingly, essential drugs such as Amoxicillin, Penicillin, Mebendazole, Niclosamide, Paracetamol, Ibuprofen, Phenytoin, Metronidazole, Quinine, Artemether, Doxycycline, Folic Acid, Cestraxone, and Cripo needed for daily consumption at health facilities among others were not in stock at health facilities during verification.

Late Distribution of Medical Supplies to health Centers

Distribution of medical supplies to health centers were not carried out on a quarterly basis as stated in the SOP. Instead, it was done weeks or months after the required time due to limited medical supplies at the central medical store.

Inadequate Inventory Management System

Chapter 5.3 of the Inventory Management of the Revised CMS warehouse 'SOP finalized' states that "comprehensive physical inventory counts should be conducted every six months". The Ministry of Health did not adhere to the SOP and as a result, stock in and out was not properly recorded. Furthermore, facilities could not provide reports on inventories conducted due to poor record system, which led to the expiration of drugs before they were distributed to the various health facilities and if possible, to patients.

Main Audit Conclusions

Based on the findings the team concluded the following:

- The mechanism put in place by the MOH to ensure that medical supplies are procured and distributed to medical facilities is ineffective.
- Funding for the procurement of medical supplies/drugs for the benefit of the citizens are not prioritize in a timely manner.
- The MoH does not adequately take Inventory of medical supplies/drugs in their warehouses, store rooms and health facilities; and as a result, drugs over stayed in stock until they expired.

Recommendations

Based on the audit findings and conclusions, the team recommends the following:

- The government of Liberia should put in place a mechanism that will facilitate the timely provision of funds for the procurement and distribution of medical supplies.
- MOH should ensure that Procurement of medical supplies be carried out on a quarterly basis; as stated in the MOH's standard operating procedures (SOP).
- MOH should ensure that quantification and specification of medical supplies (drugs) match with requested quantity and specification from health facilities.
- MOH should ensure that Data Clerks are assigned to health facilities to gather proper information on the quantification and specification of drugs for consumption as well as subsequent distribution. The reasonableness of collected data should be established before orders are mutually approved.
- MOH should ensure that drugs are available at all health facilities on a quarterly basis
- The MOH should ensure that regular physical inventory (FEFO) is taken.
- CMS/County Depots should ensure that Medical supplies/drugs to health facilities be in line with health facilities' request; especially after the reasonableness of orders have been established.
- Medical supplies/drugs should be transported in accordance with standard/documented procedures.
- Adequate Storage facilities should be developed for medical supplies/drugs to be orderly stored.
- A transparent system of assesment should be established to ensure coordination between GoL and donors for the procurement and distribution of medical supplies/drugs

1 CHAPTER 1: INTRODUCTION

1.1 Background

- 1.1.1.1 The Ministry of Health (MOH) is the statutory government institution that has the oversight responsibility of ensuring adequate procurement and distribution of Medical Supplies/drugs to the various health facilities, for the wellbeing of citizens in Liberia.
- 1.1.1.2 Adequate procurement and distribution of medical supplies/drugs is focused on how effectively and efficiently medical supplies/drugs are procured and distributed to health facilities in Liberia by the Ministry of Health. Procurement and distribution are important parts of efficient drug management and supply and is critical to all levels of health care institutions.
- 1.1.1.3 Medical supplies/drugs are essential elements of any well functioning health system. Adequate procurement and distribution of Medical supplies/drugs by MOH is about ensuring that medical facilities have the right medical supplies/drugs at the right time; patients have access to affordable and recognizable standard quality products when needed in delivering high-quality primary health care and facilitating the achievement of the Sustainable Development Goal 3: (Ensure healthy lives and promote well-being for all at all ages).
- 1.1.1.4 In order to ensure adequate procurement and distribution of medical supplies/drugs to health facilities in Liberia, the National Drugs Service (NDS) was created in 1992 to procure and deliver essential medicines/supplies and diagnostics for the entire population. It raised the standards within some of the fundamental operations of the supply chain inventory control, information management and commodity distribution to ensure an accountable, transparent and effective management of all drugs and essential health supplies.
- 1.1.1.5 Additionally, in 2016, the MOH and partners initiated a process aimed at developing a new central-level warehouse that the procurement unit would use. According to the process initiated, the Procurement Unit, in consultation with the Procurement Committee, procures medical supplies/drugs and Central Medical Store (CMS) receives and distributes these supplies for check and balance.
- 1.1.1.6 The storage infrastructure of the Central Medical Store comprises of three components. The first component is a Central Medical Store (CMS) , which receives medical supplies from the procurement unit directly through customs or Liberia-based manufacturers of health commodities, takes inventory (record the commodities received) before forwarding inventory to regional hub(s) for—picking, packing, and distribution to transit depots and health facilities within close proximity.
- 1.1.1.7 The second component is the regional hubs which also received medical supplies from the Central Medical Store and takes inventory (record the commodities received) before picking, packing, and distribution to transit depots and health facilities. The third component which is the transit depots, typically use as the existing infrastructure in the counties. The transit depots hold and distribute pre-packed commodities to health facilities.

- 1.1.1.8 According to the Ministry of Health's budget, the Government of Liberia spent over six millions United States Dollars (\$6 million USD) for the procurement and distribution of medical supplies/essential drugs from 2016/17, 2017/18, 2018/19, while Non-Governmental Organisations (NGOs) (Global Fund, USAID and UNICEF) invested resources for technical assistance to the Ministry of Health in 2010 which led to the development of a 10-year Supply Chain Master Plan (SCMP), (the roadmap and foundation) for supply chain improvement for medical supplies in Liberia.
- 1.1.1.9 Despite of all these inputs (Monetary and Technical supports) from the Government of Liberia (GoL), and with aid from the International donors/NGOs, the issue of limited essential drugs at health facilities has not been adequately addressed. There is an alarming public outcry concerning the procurement and distribution of medical supplies and limited medicines at the various hospitals, health centres and clinics around the country. The issue of limited medicines at the medical centres has also led to citizens purchasing medicines from street sellers without prescription.

1.2 Audit Motivation

- 1.2.1.1 The audit was motivated by consistent and persistent reports from different print Medias on the lack of medical supplies /drugs in health facilities around the country as indicated below:
- 1.2.1.2 The Front-Page Africa Newspaper of February 22, 2019, reported by: Lennart Dodoo, Titled:
- "Lack of drugs affecting operation of Health Facilities around the country" states that "The widespread medicinal drugs shortage is something that has grasped the nation's health sector."
- 1.2.1.3 The Newspaper also mentioned that some health facilities such as: Jackson F. Doe Memorial Regional Referral Hospital in Tappita City, Nimba County was out of stock with a very important drug called —Artesunate Combination Therapy (ACT).
- 1.2.1.4 According to the Newspaper mentioned above, a clinic in Larkayta, Margibi County, experienced shortage of nearly every essential drug. Additionally, due to the shortage of drugs, patients going to Larkayta Clinic were referred to C. H. Rennie Hospital which is the biggest public hospital in the county. As stated by the paper, this medical facility (C. H. Rennie Hospital) is also struggling with the same situation as Larkayta clinic. It is also reported that since the beginning of 2019, the hospital has not received adequate medical supplies, including toiletries (soap, tissue, etc). Therefore, patients are advised to take along toiletries (soap, tissue, etc.) when coming to the hospital.
- 1.2.1.5 Further, the FrontPage Africa Newspaper of February 8, 2019 Volume 13, No.025 by Gerald C. Koinyeneh Titled "Summon Health Minister" states that "The Minister of Health, was summoned because of numerous complaints from the citizens and the media on the closure of many government hospitals in Liberia due to lack of essential drugs and logistics."
- 1.2.1.6 According to the same newspaper, in separate communications to the House Speaker of the 54th Legislature, Representatives of District No. 4, Margibi county and District No. 3, Grand

Bassa County both stated that “the situation is having an adverse effect on the citizens of the 15 counties and that it was time for plenary of the house to intervene by summoning the Minister.”

- 1.2.1.7 However, in response to the communication brought before the House Speaker of the 54th Legislature, the Minister stated, “the Ministry acknowledges existing challenges faced by some health institutions.” The Minister also mentioned that the prevailing situation was due to the delay in getting drugs and other medical supplies to its facilities due to the relocation of the drugs and other office supplies to the central medical store now located in Caldwell.
- 1.2.1.8 The Inquirer News Paper of February 8, 2019 Vol.28 No.19 by Edwin G. Wandah Titled: ‘Buchanan Hospital may close down due to lack of drugs.’ Also states that “The only Government Hospital in Buchanan, Grand Bassa County may likely close down due to the lack of essential drugs.
- 1.2.1.9 In spite of the support from the Government of Liberia (GoL) and donor, partners, there are alarming public outcries concerning the inadequate procurement and distribution of medical supplies/drugs at various health centres, hospitals and clinics around the country; this has led to citizens purchasing medicines from street sellers with or without prescription.
- 1.2.1.10 Due to the social and economic impact the procurement and distribution of medical supplies has on the citizens and in adherence to the AG’s mandate under Section 2.1.3 of the General Auditing Commission Act of 2014, the Auditor General commissioned a Performance Audit on the Procurement and Distribution of Medical Supplies in Liberia.

1.3 Design of the Audit

1.3.1 Audit Objective

- 1.3.1.1 The main objective of the audit is to assess whether the Ministry of Health (MoH) has mechanism in place to ensure adequate procurement and distribution of medical supplies and the consistent availability of medical supplies/ drugs in medical facilities in Liberia.
- 1.3.1.2 The specific audit objectives are:
1. To assess whether the MoH ensures timely procurement and distribution of medical supplies;
 2. To determine whether the MoH ensures adequate distribution of medical supplies in health centers within the country; and
 3. To assess whether the MoH has adequate inventory system to avoid drugs getting expired before distribution and ensure consistent availability of medical supplies to medical centers/facilities.

1.3.2 Scope of the Audit

- The audited entity is the Ministry of Health and the audit focused on adequate procurement and distribution of medical supplies/drugs to health facilities for three financial years from 2016/17, 2017/18, 2018/19. The audit team visited four counties out of the fifteen for data collection.

1.3.3 Methods for data collection and Analysis

(i) Sampling Techniques used

The team used non-probability sampling to select areas visited. First, a stratified sampling was used to select the regions. The fifteen counties in the country were grouped into Northern, Central, Western and South Eastern regions. Purposive sampling was used to select the counties.

1.3.3.1 The criteria used to select county in each region were:

- i. The estimated high population of each selected county;
- ii. The highest number of hospitals within each selected county and
- iii. The highest number of health centers within each county selected

Table: 1 summarizes all regions, counties and population along with the Health centers with in the areas.

Region	Criteria			
	County	Population	# of Hospital	# of Health Centers
Northern	Nimba	462,026	2	5
	Lofa	276,863	3	9
Central	Margibi	209,923	1	3
	Grand Bassa	221,693	3	3
	Montserrado	1,118,241	4	6
	Bong	333,481	3	4
Southern Eastern	Maryland	135,938	1	2
	Grand Kru	57,913	1	4
	Sinoe	102,391	1	3
	River Cess	71,509	1	0
	River Gee	66,789	0	3
	Grand Gedeh	125,258	1	3
Western	Gbarpolu	83,388	1	1
	Bomi	84,119	1	9
	Grand Cape Mount	127,076	1	9

Source: Liberia Institute of Statistics and Geo-Information Service (LISGIS) 2008 Census

Table 2: The selected regions, counties, population and number of hospital/health centers

Region	County	Population	Number of Hospital	Number of Health Centers
Western	Bomi	84,119	1	9
Central	Grand Bassa,	221,693	3	3
	Margibi	209,923	1	3
	Montserrado	1,118,241	4	6

Source: GAC

(ii) Method for Data Collection

1.3.3.2 The audit team used three methods of data collection. These methods included interviews, review of documents and physical observations.

Documents review

- 1.3.3.3 The team reviewed documents from the Ministry of Health, Central Medical Store (CMS), hospitals and Health Centers in order to get comprehensive, relevant and reliable information on the procurement and distribution of medical supplies.
- 1.3.3.4 Documents reviewed were those within the period under audit i.e., 2016/17,2017/18 and 2018/19.
- 1.3.3.5 The reviewed documents include: (1) Contract documents on the procurement of medical supplies (2) Performance and progress reports and (3) Distribution of medical supplies reports and other documents listed in **Appendix 2**.

Interviews

- 1.3.3.6 The audit team conducted interviews with officials from the Ministry of Health, four county health officers, twenty officers in charge, four pharmacists and seventeen dispensers that are involved in the implementation of the procurement and distribution of medical supplies/drugs in order to acquire relevant information as listed in **Appendix 3**.

Physical observations

- 1.3.3.7 Based on the purposive sampling techniques used during the audit, the team visited hospitals, health centers and depots within the four counties selected from two out of the four regions. The visit aimed at conducting physical inspections on drugs supplied log (Waybill) and drugs requested log (Requisition) at these facilities as well as conditions of depots and storage of health facilities.
- 1.3.3.8 The audit team recorded results from inspections by describing the condition of the inspected facilities and areas. The team also took photos as a way of documenting what was observed during the physical inspections. **See Appendix 4** for Photographs of visited facilities.

(c) Methods for Data Analysis

- 1.3.3.9 The team used two methods (quantitative and qualitative) to analyze information/data collected from the visited facilities.
- 1.3.3.10 Quantitative data were analyzed by organizing, summarizing and compiling using various data analysis such as worksheets as well as different statistical approaches of data calculations. The analyzed data presented are in tables with quantitative labels on indicators, charts and percentage distribution.
- 1.3.3.11 Qualitative data were analyzed by content analysis. The analysis involved categories such as, events, descriptions, consistencies or differences in order to develop theory from the gathered data.
- 1.3.3.12 The information was structured and divided into different categories or topics in line with audit questions and sub-questions. The texts were compiled into these categories.

1.3.3.13 The audit questions and sub-questions were recorded in columns, while different interviews or reviewed documents in rows. Keywords were used to indicate the relevant evidence recorded in the cells in order to get an overview of analysis of similar trends and differences.

1.3.3.14 Depending on the number of interviews and documents reviewed, the information was transformed into quantitative data by going through interviews/ documents to see how many of them included positive statements about certain issues, or how many have made similar statements. Calculation expressing the percentage of examined documents or interviews that included a particular type of statement was carried out.

1.3.3.15 The presented data were analyzed and used to explain and answer the 'what' 'why' and 'how many' questions.

1.3.3 Assessment Criteria

1.3.3.16 The audit assessed the adequate procurement and distribution and constant availability of medical supplies/ drugs against criteria drawn from the Ministry of Health Procurement Standard Operating Procedure (SOP), the Liberian Integrated Distribution System Technical Report, Central Medical Store warehouse SOP and National Health Policy on Medical Supplies as detailed in **Appendix 5**.

1.4 Standards used for the audit

1.4.1.1 The audit was conducted in accordance with the International Standards of Supreme Audit Institutions (ISSAI 3000) Performance Audit Standard issued by the International Organization of Supreme Audit Institutions (INTOSAI) and in accordance with the GAC's Performance Audit Manual (Standards and Guidelines applicable to performance audit).

1.5 Data Validation Process

1.5.1.1 The Ministry of Health will be given the opportunity to go through the draft report and comment on the presented figures and information.

2 CHAPTER TWO: SYSTEM DESCRIPTION FOR THE PROCUREMENT AND DISTRIBUTION OF MEDICAL SUPPLIES

2.1 Introduction

2.1.1.1 This chapter describes the system of Procurement and Distribution of Medical Supplies/drugs. It covers governing policies, laws and regulations as well as roles and responsibilities of key players and stakeholders in the procurement and distribution of medical supplies.

2.1.2 Governing Laws, Policies, and Regulations

2.1.2.1 Laws, policies and regulations that govern the procurement and distribution of medical supplies as explained below are:

- The Act that created MoH Section 39.4 Function of the Ministry of Health (d) states that the Ministry is to provide medical care and treatment through public health facilities and decentralise such medical care and treatment.
- The Public Procurement and Concessions Act 2005 as Amended and Restated 2010 Part 1- Preliminary objective of the law, regulates all form of public procurement and concessions established by the Public Procurement Concessions Commission (PPCC), provides for institutional structures for public procurement and concessions.
- According to PPC Act Section 40, all procuring entities shall undertake procurement planning, with a view to achieving maximum value for public expenditure and the other object of the Act. In addition, the procurement plan to support the procuring entity's approved program and budget shall indicate (a) Contract page (b) Estimate cost of each package (c) The procurement method (d) Processing steps and time schedules.

National Health Policy of 2007

2.1.2.2 The process of procurement and distribution of medical supplies/drugs governed by the National Health Policy of 2007, carries the commitments of the government to reform the health sector for effective delivery of quality health services to the people of Liberia.

2.1.2.3 The Policy intent is to address challenges faced by the health sector, which are:

- Expanding access to basic health care of acceptable quality,
- Establishing the building blocks of an equitable, effective, efficient, responsive, and sustainable health care delivery system, and
- Strengthening the supply chain and rationalizing pharmaceutical management in order to ensure the availability of affordable, safe, effective essential drugs and other critical commodities.

2.1.2.4 In addition, according to Section 4.4 of the Policy, Basic Package of Health Services will allow the Ministry to increase overall coverage, strengthen procurement and management of essential drugs and commodities, monitor performance and evaluate impact in a way that allows for direct comparison between different providers supported by different programs and funding lines.

The National Drug Policy of 2001

2.1.2.5 The framework to manage and coordinate the pharmaceutical sector in Liberia is contained in the National Drug Policy (2001). This policy ensures that MOH:

- Strengthen technical support to implement the essential drug programme to contribute to the delivery of the Liberia Basic Package of Health Services (BPHS), through dissemination and use of revised and updated National Formulary (NF), and
- Standard Treatment Guidelines (STG) coordinated through the establishment of Pharmacy and Therapeutic Committees at both national and county levels,
- The quality standards set for drugs and their use are adhered to,
- Strengthen its regulatory function working through the Pharmacy Division, the Pharmacy Board of Liberia, the Drug Regulatory Authority to ensure compliance with the laws and regulations pertaining to importation, prescribing, dispensing and use of pharmaceuticals in Liberia through public and private sectors;
- Strengthen the monitoring and evaluation of all things relating to pharmaceuticals in Liberia through improved inspection, support supervision and reporting.
- Pharmaceutical support for the delivery of health services will be strengthening through the posting of Pharmacists to County Health Teams throughout the country.

Procurement Standard Operating Procedure (SoP) for the Ministry of Health (MoH)

2.1.2.6 The Ministry of Health's SOP version 4.05, page 3, Scope of the Standard Operating Procedures provides the highlights about procurement concept, workflows, procurement cycle, period for each step, roles and responsibilities of the requesting unit (RU), Procurement Unit (PU), and procurement committee. It provides step- by- step procedures for the different types of procurements at different threshold levels in detail for the MoH.

2.1.2.7 The MoH handles all purchases over USD 10,000 for goods and services and USD 30, 000 for works. The documents then summarizes the SOP for the procurement cycle and the relevant applications at the county level in light of prospective decentralization of procurement at that level.

Supply Chain Master Plan 2010 – 2020

2.1.2.8 The Supply Chain Master Plan of 2010-2020, page 7, Under Healthcare Financing Policy states "that the GoL should currently offer healthcare free-of-charge to citizens; supply essential medications that donor partners initially funded and this condition will probably change over the long term."

Storage and Distribution

2.1.2.9 Supply Chain Master Plan 2010-2020, page 30, Storage and Distribution states that "the NDS/CMS will be responsible, either directly or by coordinating with donors, for the importation of all commodities into Liberia for the public health sector. This step is important, as it restricts unregistered and unapproved drugs from entering the system."

2.1.2.10 Further, the National Drug Service/ Central Medicine Store (NDS/CMS) will work closely with Liberia Medicine Health Product Regulatory Authority (LMHRA) to ensure that the necessary permits are obtained and pre-clearance inspection documents are received before the products are imported. Therefore, Medical Supplies procured must be satisfied and tested by LMHRA and the information related to CMS with relevant documents before the carrying out of importation. A clear service-level agreement will be in place.

2.1.2.11 In addition, the Liberia Integrated Distribution System, page 7, Executive summary requires the National Drug Services (NDS) now the Central Medicine Store in Monrovia to pick and pack for all facilities in the country, while the County Depots will act as cross-docks, where orders pre-packed for facilities will pass through.

2.1.2.12 County Depots will manage a one-month buffer stock for a limited range of products. Facilities will be resupplied on a quarterly basis. The minimum stock level at the facility is 2 months, the maximum is 5 months, and the emergency order point is 1 month.

2.1.2.13 For resupply, a data collection team will travel to facilities, review the completed Stock Balance Report and Requisition Form (SBRR), complete physical inventories and calculate the quantity to order. Data are returned to the Supply Chain Management Unit (SCMU) in Monrovia, where orders are reviewed and sent to CMS/NDS for picking and packing. NDS/CMS delivers to facilities. County Supply Chain Coordinators, currently under the County Health Teams, will now be part of the SCMU and play a critical role in the resupply process.

2.1.3 National Goals and Objectives

2.1.3.1 The specific Objectives required the Ministry to ensure constant availability of safe and effective drugs and medical supplies to all segments of the population through strengthened supply chain management as part of implementing the essential drugs program for the benefit of the majority of Liberians.

2.1.3.2 In support of the delivery of a Basic Package of Health Services to all Liberians; improved logistics management information systems (LMIS) to track and account for drugs throughout the system; this is from the Government's National Health policy section 4.8 Pharmaceutical and Medical Supplies.

2.2 Roles and Responsibilities of key Players and Stakeholders in the Procurement and Distribution of Medical Supplies

2.2.1 Roles and Responsibilities of key Players

(a) Deputy Minister for Administration

2.2.1.1 Advocates for budgetary support, supervises the Procurement Unit and ensures that everything done is in compliance with the Public Procurement and Concessions Act (PPCA).

(b) Deputy Minister and Chief Medical Officer

2.2.1.2 Has oversight on the distribution of medical supplies/drugs to the counties, all county health officers reports to the Chief Medical Officer.

(c) Director of Procurement:

- The Director of procurement Unit/MoH, in consultation with the Procurement Committee, does all the procurement activities of Medical supplies/ drugs using the Amended and Restated Public Procurement and Concessions Act, 2005 approved September 16, 2010.

(d) Managing Director – Central Medicine Store:

- The Managing Director of Central Medicine Store is responsible for the distribution of medical supplies across the fourteen counties.

(e) Director, Supply Chain Management Unit (SCMU):

- The Director of Supply Chain Management Unit, evaluates past performance data to forecast needs and production scheduling, develops strategic plans to improve productivity, quality, and efficiency of operations. Additionally, Supply Chain Director typically reports to top management.

(f) County Health Officers:

- Responsible to ensure that all health facilities are functioning according to the Ministry of Health's guidelines in the county. Ensures that all health programs and interventions are implemented according to design and standards. Also, ensures that health facilities receive their allotted medical and non-medical supplies and account for them. Responsible to ensure that there is coordination between parties/stakeholders and the health system.

(g) County Pharmacists:

- Prepares medical supplies/drugs request for the county, sends it to the Supply Chain Unit at the Ministry of Health, receives the supplies from NDS/CMS, stores the supplies, prepares delivery notes and distributes the supplies to the various health facilities in the county.

(h) Officer in charge (OIC) / Medical Director of Health facilities:

- Facilitates adherence to treatment and prescription policies, while responsibilities are to implement updated program policies on rational medicines use, adheres to STGs during patients' screening, collaborates with County Health Team (CHTs) to identify issues and risk in treatment and prescription policy adherence.

2.3 Roles and Responsibilities of Stakeholders/donors in the Procurement and Distribution of Medical Supplies/drugs:

United States Agency for International Development (USAID)

- 2.3.1.1 The United States Agency International Development (USAID) provides pragmatic drugs (Malaria, TB and HIV medication) and contracting Chemonics for the transportation of medical supplies across the country.

World Health Organization(WHO)

2.3.1.2 The World Health Organization (WHO) provides progmatic drugs (Malaria, TB and HIV medication) across the country.

Global Fund

2.3.1.3 Global Fund (GF) provides progmatic drugs (Malaria, TB and HIV medication) with other logistical and financial support to the MoH across the country.

United Nations Fund of Population Activities (UNFPA)

2.3.1.4 The United Nations Fund of Population Activities (UNFPA) provides progmatic drugs. Increased availability and use of integrated sexual and reproductive health services (including family planning, maternal health and HIV) that are gender-responsive and meet human rights standards for quality of care and equity in access to medication.

United Nation Children Fund (UNICEF)

2.3.1.5 With the aim of ensuring no child or mother dies of preventable causes, UNICEF is working to increase access to healthcare services for all. UNICEF supports efforts to prevent mother to child transmission of HIV, reduce child and maternal deaths, and prevent deaths from vaccine preventable diseases.. In addition, UNICEF is working to prevent children and mothers from suffering from malnutrition, by promoting improved nutrition intake or treatment for those suffering from malnutrition, and preventing health effects or deaths.

2.4 Resources Allocated for the Procurement and Distribution of Medical Supplies

2.4.1 Funding

2.4.1.1 Authorities at the Ministry of Health informed the Audit Team that the target set for Procurement and Distribution of Medical Supplies/Drugs has always been around Sixteen to Twenty Million United States Dollars yearly to address the national needs for medical supplies/drugs. Table 2.1 shows detail contributions by Government of Liberia and donors per fiscal period.

Table 2.1 Actual allocations from Government of Liberia and Global Fund to the Ministry of Health for Procurement and Distribution of Medical Supplies/drugs.

F/Y	GOL	Global Fund	Both GOL and Donors
2016/2017	\$1,020,761	\$3,055,346.25	\$4,076,107.25
2017/2018	\$2,150,000	\$15,440,234.58	\$17,590,234.58
2018/2019	\$ 1,500,000	\$6,599,591.12	\$8,099,591.12

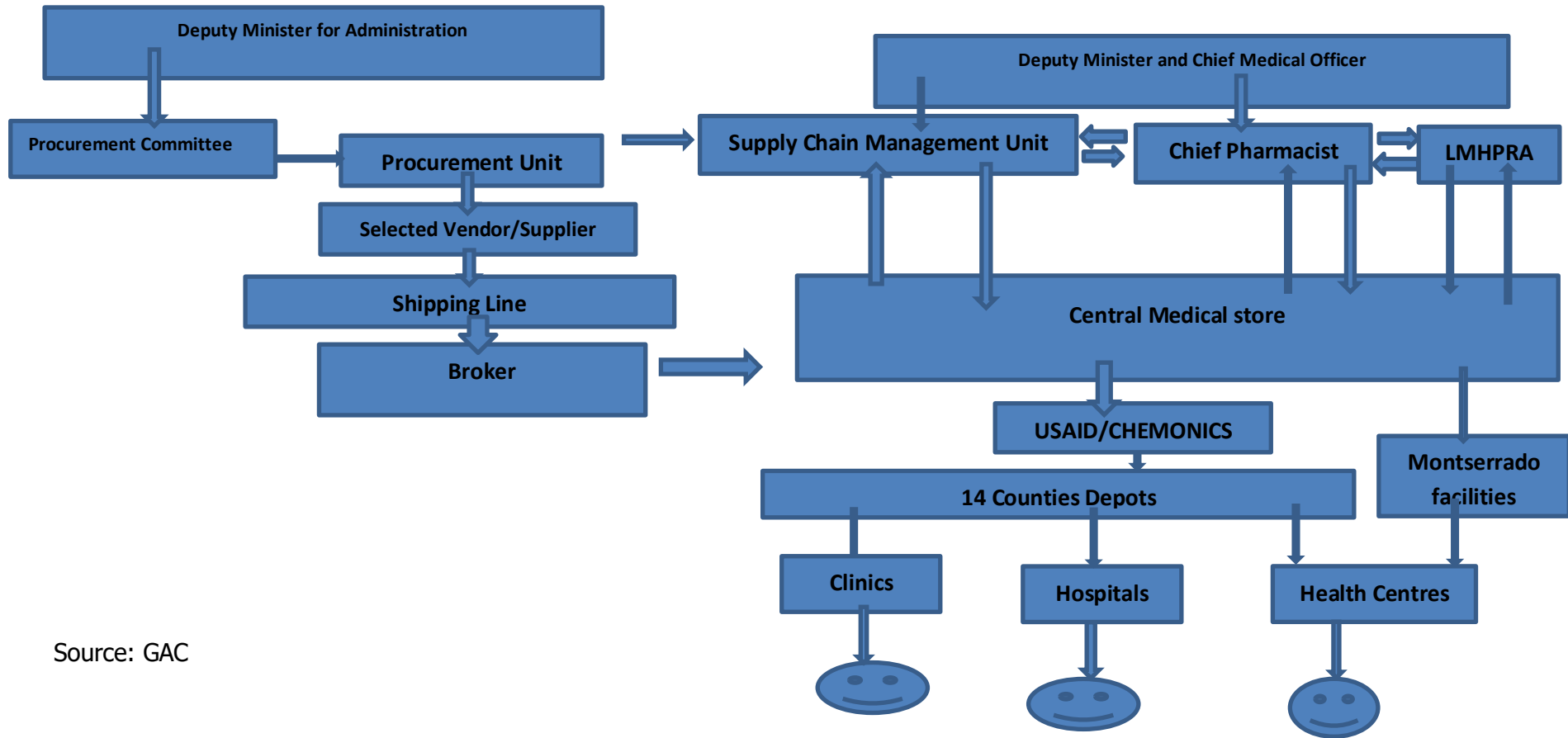
Source: GOL National Budget and MOH Financial documents

Narrative on System for procurement and distribution of medical supplies

2.4.1.2 The Procurement and Distribution of Medical Supplies starts from the Deputy Minister for Administration (DMA). The DMA informs the Chief Medical Officer of Liberia about available funds while he/she also inform the Chief Pharmacist and the Supply Chain Unit Director to do National quantification and specification of medical supplies. The quantified and specified medical supplies information is presented to the Procurement Unit in order to move ahead with the procurement process. The Procurement of essential drugs is carried out in line with the Public Procurement and Concessions Act (PPCA).

- 2.4.1.3 When the Procurement Unit receives tenders/bids for Medical Supplies/drugs, the Procurement Committee sets up an Evaluation Team that evaluates bids and recommends the most responsive supplier for contract award to the Procurement Committee (PC). The Procurement Committee supervises the Procurement Unit and serves as the highest procurement decision making body in every entity.
- 2.4.1.4 The PC reviews the report and accepts or rejects with reason. Whenever the PC accepts the recommendations from the Evaluation Committee, it instructs the Procurement Director to proceed with the formation of contract in line with the PPCA. After both parties have signed the contract, the Procurement Unit places a Purchase Order (PO) for the contracted amount with all stakeholders involvement. Whenever the Shipment of medical Supplies/drugs is coming in, the shipping line informs the Deputy Minister for Administration about the expected arrival date. That information is attached to a written communication to the Commissioner General of the Liberia Revenue Authority for Duty Free privillage.
- 2.4.1.5 Thereafter, the Broker expedites the clearing and delivery to the Central Medicine Store (CMS) under the supervision of the supply chain management. The Central Medicine Stores liases with LMHPRA and other partners to inspect the drugs for acceptance. Once these supplies are inspected and accepted, distributions are based on approved requisition from the SCMU.
- 2.4.1.6 USAID hired the services of Chemonics to provide trucking services to counties and regional depots because of the Ministry of Health's limited logistics (Trucks) to transport medical supplies.
- 2.4.1.7 These supplies are accompanied by staff from CMS and Chemonics with both parties handling keys to those supplies. At the level of the county or regional depots, Global Fund provides means of transportation to health centers, Clinics and hospitals across the country. To further ensure that these supplies reach their final destinations, Last Miles (NGO group) helps to transport these drugs to hard to reach areas, bad road and footpath areas.
- 2.4.1.8 From the county level, the Supply Chain Management Unit and CMS both have separate teams that are required to monitor delivery. ***See Figure 2.1 illustration on the system.***

Figure 2.1 GAC's Illustration on the system of procurement and distribution of medical supplies



Source: GAC

3 Chapter Three: Findings

3.1 Introduction

3.1.1.1 This chapter presents findings from the audit conducted on the Adequate Procurement and Distribution of Sedical supplies/Drugs. The Ministry of Health with aid from the International community, has put in place some mechanism to ensure that procurement and distribution of medical supplies/drugs is effective and efficient in Liberia. Though the Ministry made some efforts to facilitate effective procurement and distribution of medical suppliers, the audit revealed the following:

3.2 Delay in the Procurement of Medical Supplies/drugs

3.2.1.1 According to section 4.8 (b) of the National health policy on medical supplies/drugs, MOH is to ensure constant availability of drugs and medical supplies to all citizens.

3.2.1.2 Furthermore, MOH's procurement SOP Version 4.05, page 17, Procurement time frame states that, 'prior notice to the commission of contract awards for procurement of goods: USD \$200,000.00 or greater should be within 14 working days. Page 19 also notes that procurement of high value items (Drugs) should be within 2 to 4 months in every fiscal year.'

3.2.1.3 Procurement contract Ref: # IFB –MOH/HSG/LICT 001/2016/17; states that 'payment of contract should be in sixty (60) days after submission of invoice or claim by supplier.'

3.2.1.4 However, the audit team noted from contract documents reviewed, that procurement was not done in sixty days as stated in the contract. Procurement of medical supplies/drugs should have been completed by March 2017, instead; there were two addenda made to extend the time of procurement. The original price of this contract was USD \$745,486.66. The first Addendum was June 27, 2017 increasing the original price to USD \$1,682,290.07 while the second addendum on October 27, 2017 increased by USD \$358,330.00 totalling the expected payment for the contract to USD \$2,040,620.07. All these addenda occurred while the contract was still in its implementation stage. Due to the late allotment of fund to MOH by GOL, the procurement of these drugs & pharmaceutical products did not meet up with earlier time frame slated in the contract; thereby causing medical facilities going out of medical supplies/drugs. Meanwhile, documents for fiscal years 2017/18 and 2018/2019 were not provided by the MOH

Management's Response

- 3.2.1.5 *The Ministry of Health wish to inform the auditors that procurement of health sector goods as it is called is more complex as compared to the regular procurement of goods, works and service. This is because of the sensitive nature of the commodities. There are many stakeholders involved with the procurement process, all of whom have defined roles and responsibilities that are in consonance with their statutory functions. Stakeholders in the cycle of health goods procurement are the Liberia Medical and Health Products Regulatory Authority (LMHRA), Central Medicines Store (CMS), National Supply Chain Unit and World Health Organization (WHO).*
- 3.2.1.6 *A good procurement process for health sectors goods takes in to full considerations the inputs of all stakeholders.*
- 3.2.1.7 *Besides, health commodities are not like other commodities that are manufactured and stored awaiting shipment to destinated point upon request. By standards and best practises, when the procurement and selection processes are completed, giving the value of the contract package, a PPCC No-Objection is required before the contract goes to the Ministry of Finance and Justice for signing, there is no stipulation in the framework that provides duration or time limit at those Ministries. The manufacturer/vendor will have to receive a signed and valid contract before production orders can be placed, after which shipments are made. Following that, the Liberia Medical and Health Product Regulatory Authority (LMHRA) will have to satisfy and register those commodities before acceptance. The process is a bit complicated and requires time so as to maximize output.*

3.3 Audit comment

- 3.3.1.1 We acknowledge the roles of all the different stakeholders in the procurement and distribution of medical supplies/ drugs and MOH assertion that the process is a bit complicated and requires time so as to maximize output. However, the risks to those asertions could be minimized/curtailed through proper coordination amongst the stakeholders. Also, an adequate, suffieciently timed needs assessment, and an efficient procurement planning process, considering the volume and type of procurement, lead time and the logistical arrangement needed to acquire said goods are also essential. Accordingly, we maintain that there were significant delays in MOH procurement process for the period under audit, thereby causing medical facilities going out of medical supplies/drugs.

3.4 Delays in funding

- 3.4.1.1 According to the Public Financial Management Act 2009 (PFMA), Section 24.4, all contracts falling within the threshold set forth in the regulations under the Public Procurement and Concessions Commission Act shall be responsible for maintaining an up to date record of contracts entered into, and for ensuring that all contracts are fully reflected in the budget estimates approved by the Legislature for the years in which they will require funding.
- 3.4.1.2 From document reviewed by the audit team, budgetary allotments were made for MOH to procure and distribute medical supplies/drugs over the years under audit, however, from the procurement contract reviewed by the audit team, the Ministry received late allotments from National Government for the procurement of medical supplies, thereby causing delay in funding contracts awarded to vendors for the procurement and distribution of medical supplies.

3.4.1.3 In addition, interviews conducted with key players responsible for the procurement and distribution of medical supplies/drugs revealed that constraints faced in the procurement and distributions of medical supplies are also caused by late budgetary allotment and logistical constraints.

3.5 Absence of Trained Data Clerks at Health Facilities

3.5.1.1 According to the Revised Supply Chain Master Plan (2015 – 2020) Service delivery point (Health facilities) role on Information Management is to monitor and ensure timeliness, completeness and accuracy of Logistic Management Information System (LMIS) and Electronic Logistic Management Information System (eLMIS) reports. LMIS/eLMIS supervises and strengthens recording and reporting at health facilities on county levels.

3.5.1.2 Data clerks are trained on the LMIS & eLMIS to effectively manage information on the quantification, specification of drugs and birth registration in the country by Supply Chain Unit.

3.5.1.3 Documents reviewed by the audit team noted 102 data clerks were trained and assigned in the counties at health facilities.

Chart 1 Below show the number of Data Clerk and LMIS/eLMIS trained in Liberia

COUNTY	TOTAL # OF DATA CLERK	TOTAL#OF LMIS/eLMIS	TOTAL # YET TO GET TRAINING
Cape Mount	5	5	0
Bomi	4	1	3
Grand Kru	7	7	0
Rivercess	7	7	0
Sinoe	8	5	3
River Gee	9	5	3
Maryland	6	6	0
Grand Gedeh	7	6	1
Gbarpolu	7	6	1
Bong	9	9	0
Lofa	6	6	0
Nimba	7	7	0
Grand Bassa	7	5	2
Margibi	6	4	2
Montserrado	7	7	0
TOTAL	102	87	15

Source: Monitoring & Evaluation, MoH

3.5.1.4 However, during the field visit in the four counties, the audit team did not see any data clerk assigned in the counties, nor did the audit team receive reports on these Data Clerks activities. We observed that medical facilities were not capturing the actual usage of drugs supplied and dispensed on a timely basis which could lead to incorrect data during the reporting period on drugs supplied and dispensed.

Audit Comment

3.5.1.5 No response was provided by the Ministry of Health on the above finding.

3.6 Limited Medical Supplies in Health Centers

3.6.1.1 According to section 4.8 (b) of the National Health Policy on medical supplies, MOH is to ensure constant availability of drugs and medical supplies to citizens.

3.6.1.2 During the interview conducted with 44 key players (CHOs, OICs Dispensers and Pharmacists) at health facilities in the four counties, the audit team was informed that there were limited medical supplies/drugs at their facilities due to transportation problem and bad road condition.

3.6.1.3 During the site visitation, the team observed that essential drugs such as Amoxicillin, Penicillin, Mebendazole, Niclosamide, Paracetamol, Ibuprofen, Phenytoin, Metronidazole, Quinine, Artemether, Doxycycline, Folic Acid, Cestraxone, and Cripo that are greatly needed to be in health facilities were limited supply in facilities such as; Well Babyma, St. John, Owengrove in Grand Bassa County; C. H. Rennie, Gbaye Town facility, and Larkayta health center in Margibi County; Gonzipo medical center, Zordee, and Malama facility, Liberia Government Hospital and Dagweh Town facility in Bomi County.

3.6.1.4 Due to the absence of these medical supplies; doctors, pharmacists and nurses were constrained to make prescription for patients.

3:1 GAC's Photos: Empty shelves at health facilities store rooms in Bomi County.



Liberia Government Hospital dispensary



Dagweh Town Clinic store room

Management's Response

3.6.1.5 According to the national quantification reports of health sector commodities, the annual projection for commodities stands at about US\$ 16 to 20,000,000. Because of the computing priorities, National Governments has not been in the position to foot the associated costs. What government has ever appropriated in the national budget per annum has not exceeded US\$ 4,000,000.00. Thanks to our partners who have over the years contributed to augment the Government's efforts to some extent. Notwithstanding, a combination of both Government and partners contributions cannot still meet the more than half the country needs. This means despite the many contributions and efforts by the Government and partners the health sector still remains challenged. The gap can be calculated at about 60%.

Audit comment

3.6.1.6 We acknowledge the challenges faced by the Ministry in sourcing funds. However, from physical verification and interviews conducted, the timely usage of available resources will reduce the shortage of essential drugs at health centers across the country at a reasonable level.

3.7 Late Distribution of Medical Supplies to Health Centers

3.7.1.1 According to the Liberia Integrated Distribution system technical report page 21, Inventory control distribution of drugs is to be bi-monthly, quarterly and trimester.

3.7.1.2 Also, interview conducted with key players namely; (OICs, Pharmacists, dispensers, directors and ministers) at the Ministry of Health and other health facilities, it was noted that distribution of medical supplies should be done on a quarterly basis (every 3 months).

3.7.1.3 However, the audit team reviewed waybills/supplies logs of health facilities and noticed that delivery of supplies was done in four to five months or beyond after previous distribution.

3.7.1.4 Additionally, during interview conducted with thirty four (34) key players, twenty one (21) stated their facilities received supplies on a quarterly basis contrary to what the audit team reviewed from their logs (Waybills & requisition forms); medical supplies were distributed and received after four to five months. Thirteen (13) stated they received supplies not on a quarterly basis, meaning after distribution, it takes a period of four to five months plus before they are supplied by MoH due to bad roads, logistic problem and funding to the Ministry to distribute on a timely basis; leaving health facilities (Hospitals, Medical Centres and Clinics) constrained to let patients go without drugs.

Audit Comment

3.7.1.5 No response was provided by the Ministry of Health on the above finding.

3.7.2 Expired Medical Supplies/drugs at Health Facilities

3.7.2.1 According to the Revised CMS warehouse SOP finalized, 6.1.1 Inventory Management; Cartons of medical supplies/drugs in warehouse should be appropriately arranged on the racks in a manner that will make the expiry date and batch information labels visible. In

addition, the warehouse verification exercise should be carried out at least twice in a month to guarantee accuracy of batch information in Supply. 6.2.2 states that full stock count must be conducted at least once in three months and “first expired/ first out” (FEFO) principle must be followed when storing and distributing medical supplies/drugs.

3.7.2.2 During verification in January 2020, the Audit Team identified expired drugs at Margibi County and Grand Bassa County Depots.

3.7.2.3 In addition, from reports reviewed by the team, drugs such as AB Bott m. sample- 224 cartons – exp. April 6,2019, Acid phosphatase- 46 cartons –exp. April 19,2019, Prednsolone 5mg -5,376 cartons –exp. March 19,2019, Artemether injection 80mg -3,540 cartons- exp. April 19,2019, PIMA CD4- 180 cartons expired March 1, 2019 were found at health facilities.

3.7.2.4 Central Medical Store June to July 2019 expired commodities report revealed that while distributing the 12th Round Last Mile Drugs to Bomi County, they experienced expired drugs during the offloading of these supplies. In addition, the audit team identified expired drugs at Margibi County Depot and Grand Bassa County Depot.

3.7.2.5 The existence of expired drugs (at CMS and County depots) are the result of not conducting effective and timely Comprehensive Inventory and the First Expire, First Out (FEFO) principle at Central Medical Store (CMS), depots and storerooms of health facilities. Consequently, medical supplies/drugs expire unknowingly to health facilities when it should have been used before the expiration date, causing loss of resources and inadequate medical supplies at health facilities.

3:2 GAC’s Photos: Expired drugs at health facilities visited.



Grand Bassa County Depot



Margibi County Depot

Management's Response

A. Expiry of Commodities:

3.7.2.6 *Several factors are responsible for inventory. Item shelf life. Some commodities have short lifespan, and our national distribution schedule is quarterly (every three months). For example, if a reagent with 3 to 6 month lifespan is procured, the time to ship and the time to distribute plus final dispatch from the county depot to the facility is usually short.*

B. Solution:

3.7.2.7 *Partners and donors must follow the donation guidelines and the national quantification report to know what to procure for the country. Also some commodities donated are under utilized at the facilities because they are not in need. The slower a commodity is consumed the likelihood of it getting expired at the facility.*

C. Inventory management system

3.7.2.8 *Inventory management is a challenge. Because it is new, the system is as good as how it is used. Then MoH, with USAID support, is supporting capacity building of staffs using the system. As of December 2020, Long term technical Assistant is working with the MoH data efficiently use the system.*

Audit comment

3.7.2.9 The Ministry's failure to fully implement its CMS warehouse SOP on Inventory is the primary cause for medical supplies/drugs expiring before, during and sometimes after distribution to health centers.

3.7.2.10 We also acknowledge MOH acceptance that its inventory Management System is a challenge, and its commitment to build staff capacity to efficiently use the system as of December 2020. We will verify the level of usage during subsequent follow-up.

3.8 Inappropriate Storage Facilities at Health Centers

3.8.1.1 According to Good Storage Practices used by MOH on storage for medical supplies/ drugs, Depots/ store rooms of health facilities as well as dispensaries are to be in a cold condition of 25 to 30 Degree Celsius and should have refrigerated air conditioning units to operate 24 hours daily. The Depots/ store rooms should be connected to an emergency power supply, should have refrigerator for storage of vaccines, anti-venom and other medical supplies that required refrigeration to maintain the potency and life span of medical supplies/ drugs. Drugs should be protected from open air but should have adequate light.

3.8.1.2 According to interviews conducted with key players at MoH head office "at the county level (CHOs, OICs Dispensers and Pharmacists) the regional or county depots that served as extension of the CMS/NDS have inappropriate storage facilities for medical supplies/drugs. This problem has led to the use of sub-storage, such as small rooms, and corridors.

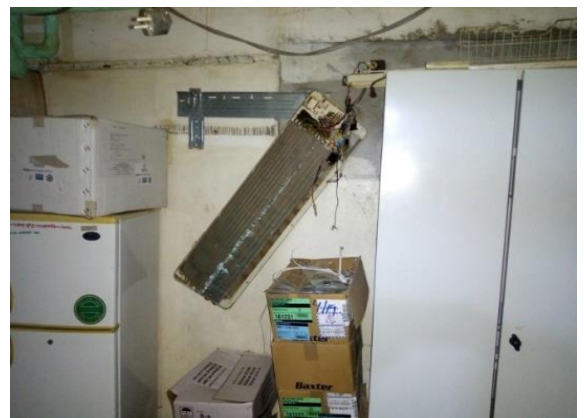
3.8.1.3 This situation is further worsened by the fact that there are interrupted power supplies in most facilities, and no county has adequate cold chain accommodation.

3.8.1.4 The team also visited health facilities in counties selected; it was observed that facilities store rooms, depots and dispensaries are not in good conditions to give medicine/drugs the right temperature. Some had windows and doors (string door) opened to warm air and heat due to lack of consistent power supply, while others had leaking roof which lead to the impotency and short lifespan of medical supplies/drugs.

3.3 GAC's Photos: Pictures shows dilapidated storages facilities; Sassa Town Clinic showing damaged and leaking roof while in Tubmanburg, Bomi County, the County Depot showed damaged Air condition and refrigerators.



Sass Town Clinic, Bomi County



Bomi County Depot

Audit Comment

3.8.1.5 No response was provided by the Ministry of Health on the above finding.

3.9 Inadequate inventory management system

3.9.1.1 According to the Revised CMS warehouse SOP finalized, chapter 5.3 (Inventory management) comprehensive physical inventory counts should be conducted at least every 6 months. Inventory in the store rooms of health facilities and storages of Central Medical Store should be done biannually with an automated system.

3.9.1.2 Additionally, Circulated inventory as described in the CMS SOP is a thorough process that involves manual counting of all commodities in store rooms on a monthly basis, so as to be aware of supplies that are nearing expiration date.

3.9.1.3 During interview conducted with 22 key players (CHOs, OICs Dispensers and Pharmacists) assigned at CMS, County depots, Hospitals and Health centres, 2 facilities stated that they conducted inventory biannually; 6 facilities stated that they conducted physical inventory, 5 facilities stated that they conducted FEFO; while 9 stated they do not conduct any inventory.

3.9.1.4 However, the audit team could not determine whether inventory was conducted or not because these facilities could not provide report on inventories conducted. The failure to

conduct adequate inventory at all storage facilities, led to drugs being expired before they were distributed to health facilities. The failure to facilitate adequate inventory management system may also lead to poor data collection for adequate future ordering and monitoring.

Audit Comment

3.9.1.5 No response was provided by the Ministry of Health on the above finding.

3.10 Inconsistency between Quantity Supplied and Quantity Requested of Medical Supplies/drugs

3.10.1.1 According to section 4.8 (b) of the National Health Policy on medical supplies, MOH is to ensure constant availability of drugs and medical supplies to citizens.

3.10.1.2 Health facilities made request for quantity of drugs based on the consumption rate of said drugs within their respective facilities.

3.10.1.3 From the review of medical supplies request logs and supply logs, the audit team noted that the quantity of medical supplies requested and received at health facilities through CMS were often not consistent.

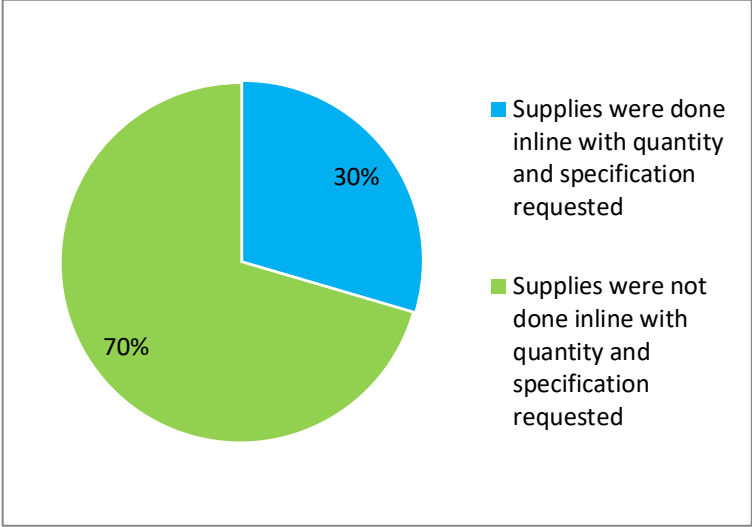
3.10.1.4 There are instances in which quantities requested by health facilities were reduced by CMS during delivery as drugs commonly used were requested for but weren't supplied and were instead replaced by drugs not requested due to what the CMS had available at that time.

3.10.1.5 However, Requisition (SSRR) & Stock status reports, waybill & Internal Requisition and emergency Order Form(EOF), reviewed from facilities visited, indicated that medical supplies distributed at health facilities were not in line with the quantity and specification requested by health facilities due to limited quantity and specification available at the CMS/county depot.

3.10.1.6 As a result, facilities were out of needed medical supplies/drugs for days and months, therefore, medical practitioners gave prescriptions for unavailable drugs to patients to buy in drug stores until drugs are available for distribution.

3.10.1.7 In addition, interviews conducted with 44 key players (three (3) County Health Officers(CHOs), twenty one (21) Officer in Charge(OICs), four (4) Pharmacists, and nine (9) dispensers), 31 persons constituting 70% confirmed that supplies were not done in line with quantity and specification requested, while 13 persons constituting 30% said they received supplies in line with quantity and specification requested.

Par chart 1: Analysis of the 44 key players interviewed by the audit team



Audit Comment

3.10.1.8 No response was provided by the Ministry of Health on the above finding.

4 Chapter 4: Conclusions

4.1 Introduction

4.1.1.1 This chapter provides the general conclusion and specific conclusion on the audit.

4.1.2 General Conclusion

4.1.2.1 Based on the findings the team concluded on the following:

4.1.2.2 The Ministry of Health, in implementing the processes of procurement and distribution of medical supplies/drugs as spelt out in section 4.8 (b) of the National Health Policy and the MoH procurement's SOP Version 4.05, had a lot of challenges which made the process ineffective and inadequate.

4.1.2.3 Medical supplies were not procured in time by MoH.

4.1.2.4 Funding for the procurement of medical supplies/drugs for the benefit of the citizens are not prioritize in a timely manner.

4.1.2.5 The mechanism put in place by MOH to ensure that staff (data clerks) are assigned to the various health facilities to supervise and strengthen recording and reporting on the consumption of medical supplies/drugs at health facilities in the country or and at county levels was not effective.

4.1.2.6 Medical supplies /drugs were not distributed to medical facilities at the required time (quarterly basis).

4.1.2.7 Expired medical supplies/drugs were found in health facilities as a result of inadequate inventory management system.

4.1.2.8 Storage at health facilities did not meet up with the required storage practices which states that' storage is to be in specified/good conditions for the safety of medical supplies/drugs.

4.1.2.9 Medical supplies/ drugs were not distributed/supplied to health facilities based on request and needs of the facilities.

5 Chapter Five: Recommendations

5.1 Introduction

5.1.1.1 This chapter presents recommendations to the Ministry of Health (MoH) which when implemented, could help ensure the smooth procurement and distribution of medical supplies in the country.

5.1.1.2 The General Auditing Commission believes that full implementation of these recommendations could significantly ensure improvement in the procurement and distribution exercise of medical supplies by the Ministry of Health. The implementation will also ensure that services on the procurement and distribution of medical supplies are conducted with regard to the 3Es of Economy, Efficiency and Effectiveness in the use of public resources.

5.1.2 Recommendations to the Health Ministry (MoH)

5.1.2.1 MOH should ensure that procurement of medical supplies be carried out on a quarterly basis as stated in the MOH's standard operating procedures (SOP) to meet the medical needs of the citizens

5.1.2.2 The Government of Liberia should put in place a mechanism that will facilitate timely provision of funds for the procurement and distribution of medical supplies.

5.1.2.3 MOH should ensure that Data Clerks are assigned to health facilities to gather proper information on the quantification and specification of drugs received and dispensed. Official periodic reports on these activities should be presented to the relevant authorities and filed accordingly.

5.1.2.4 MoH should ensure that personnel assigned at CMS are trained and qualified in the requirements of product identification, the detection and the avoidance of counterfeit/expired medical supplies/drugs entering the supply chain. Evidence of training should be documented and filed accordingly.

5.1.2.5 MOH should ensure that drugs are made available on a quarterly basis to all health facilities.

5.1.2.6 Medical supplies/drugs should be transported in accordance with procedures such that:

- The identity of the product is not lost.
- The product does not contaminate and much not be contaminated by other products.
- Adequate precautions are taken against spillage, breakage, misappropriation, theft and inappropriate environmental condition.

5.1.2.7 The MOH should ensure that regular (monthly or biannual) physical inventory (FEFO) is taken to avoid the distribution of expired drugs and record should show observations made during the inventory and, where applicable, proposals for corrective measures.

- 5.1.2.8 There should be an effective follow-up program to evaluate and monitor the inventory report and the records of any corrective actions taken.
- 5.1.2.9 CMS/county depots should ensure that Medical supplies/drugs distributed to health facilities are inline with health facilities' requests.
- 5.1.2.10 MOH should ensure that all storage at health facilities meet up with the required storage practises (be in a cold condition of 25 to 30 degree Celsius and should have refrigerated air conditioning unit with constant power supply).
- 5.1.2.11 Storage facilities should be of sufficient capacity to allow the orderly storage of the various categories of medical supplies/drugs namely essential and pragmatic drugs to be released earlier or later based on the expiration date.
- 5.1.2.12 The Ministry of Health should provide temperature monitors at all storage facilities especially in areas that are most likely to experience fluctuation of power supplied.
- 5.1.2.13 An assessment of national procurement and distribution system should be conducted to ensure proper coordination between GOL and the donor community during procurement of essential and pragmatic drugs.
- 5.1.2.14 This process will facilitate the gathering of data by the authorities of the Ministry of Health on the quantification and specification of essential and pragmatic drugs that are needed in the various hospitals, Health Centers and clinics. During this process, the Ministry should take in to consideration the life span of the drugs to be procured, meaning drugs that are procured should be able to meet up with the distribution schedules (1st, 2nd and 3rd quarters) as indicated in the SOP.
- 5.1.2.15 The Ministry of Health and the donor community should give special attention to drugs that have short lifespan during procurement and distribution so that they will not expire while going through the different stages of the process as indicated in the Ministry's response.
- 5.1.2.16 Approval of medical supplies/ drugs to be procured should be given on the category of products needed, the financial investment in the product, the procurement agent used by the donor, and the ensuing storage and distribution channels to streamline the medicines supply systems. This system may prevent partners and donors from over or under stating products support and the financial investment in the product donated to the country.
- 5.1.2.17 Authorities at the Central Medical Store should establish an automated inventory system that will automatically signal when a particular medical supplie/drug is nearing expiration or has expired. This system should support the parking of the drugs in the order of FIRST EXPIRE FIRST OUT (FEFO).

Appendices

Appendix 1: Audit questions and sub questions

Audit Question 1	Does MoH ensure procurement and distribution of medical supplies are conducted on time?
Sub-Audit Question 1.1	Does the MoH conduct procurement of medical supplies on time?
Sub-Audit Question 1.2	To what extent does MoH ensure distribution of medical supplies to health centers?
Audit Question 2	Does MoH ensure adequate distribution of medical supplies to health centers?
Sub-Audit Question 2.1	Does MoH adhere to the measures set by the ministry for adequate distribution of medical supplies?
Sub-Audit Question 2.2	Is the measure for the availability of medical supplies effective?
Sub-Audit Question 2.3	Does the MoH supply drugs to health centers based on requested quantity and specification of drugs by medical centers?
Audit Question 3	Does MoH facilitate adequate inventory management system in distribution of medical supplies?
Sub-Audit Question 3.1	To what extent is the inventory system functional?
Sub-Audit Question 3.2	What are the measures to ensure adequate implementation of inventory system for the distribution of drugs to health centers?

Source: GAC Auditor

Appendix 2: List of documents reviewed

S/N	Document reviewed	Reason
1.	MoH Procurement standard operation procedure (PSOP)	To determine whether the procedure(s) in the SoP is followed in the procurement of medical supplies
2.	Public Procurement Concession Act (PPCA)	To verify the procurement process nationally
3.	Central Medical Store SoP	To verify if Central Medical Store SoP is used in the inventory management system of the distribution of medical supplies
4.	Contracts documents for the year under audit	To verify whether contracts awarded to vendors met the required terms and conditions in the procurement of medical supplies by MoH and vendors.
5.	Bidding Documents	To ensure that the bidding process for the selection of vendors was done in line with requirement for the procurement of drugs.
6.	Distribution Logs	To observe the quantity and specification of drugs supplied to health centers
7.	Supply chain management unit reports for the year under audit	To ensure that SCMU reports on the procurement and distribution of medical supplies is reconciled to procurement done during the year under audit.
8.	MoH Act	To know the functions of MoH on the program

Source: Auditor Analysis

Appendix 3: List of Officials interviewed

Location	Official to be Interviewed	Reason
Ministry of Health (MoH)	Procurement Director	To get information on how the procurement process of medical supplies is carried out.
MoH	Director Supply Chain Management Unit (SCMU)	To get information on his/her involvement in procurement and distribution of medical supplies
Ministry of Health	Chief Medical Officer of Liberia (CMO)	To gather information on his involvement on the program
Central Medical Store	Managing Director Central Medical Store (CMS)	To gather information on the activities in managing the medical store
CMS	Operation Manager Central Medical Store (CMS)	To find out how he/she supervises the store, how drugs are distributed to various health centers within the country.
Counties	County Health Officers	To access their role in the distribution of medical supplies to county health facilities
Counties	OICs of health centers	To gather information whether MoH supply them with medical supplies as required.
Counties	County Health Team	To get information on their involvement in the distribution of medical supplies

Source: Auditors Analysis

Appendix 4: Pictures Taken by GAC on health facilities visited in the four counties during field verification



Appendix 5: **Assessment Criteria**

Audit questions and sub-questions	Audit Criteria	Source of Criteria
<p>Audit question 1. Does MoH ensure procurement and distribution of medical supplies is conducted on time?</p>	<p>MoH procurement SOP Version 4.05, page 17 Procurement time frame states, prior notice to the commission of contracts awards for procurement of goods: USD \$200,000 or greater should be within 14 working days. Page 19 noted procurement of high value items (Drugs) should be within 2 to 4 months period every fiscal year.</p>	<p>Ministry of Health Procurement Standard of Procedure</p>
<p>Sub-Audit Question 1.1 Does the MoH conduct procurement of medical supplies on time?</p>	<p>According to section 4.8 (b) of the National Health Policy on Medical Supplies, MoH is to ensure constant availability of drugs and medical supplies to all citizens.</p>	<p>National Health Policy on Medical Supplies</p>
<p>Audit Question 2 Does MoH ensures adequate distribution of medical supplies to health centers?</p>	<p>According to section 4.8 (b) of the National Health Policy on Medical Supplies, MoH is to ensure constant availability of drugs and medical supplies to all citizens.</p>	<p>National Health Policy on Medical Supplies</p>
<p>Sub-Audit Question 2.1 Does MoH adhere to the measures set by the ministry for adequate distribution of medical supplies?</p>	<p>The Liberia Integrated Distribution System Technical Report page 21, Inventory control states that distribution of drugs is to be bi-monthly, quarterly and trimester.</p>	<p>The Liberia Integrated Distribution System Technical Report</p>
<p>Sub-Audit Question 2.2 Isqa the measure for the availability of medical supplies effective?</p>	<p>According to section 4.8 (b) of the National Health Policy on Medical Supplies, MoH is to ensure constant availability of drugs and medical supplies to all citizens.</p>	<p>National Health Policy on Medical Health Supplies</p>
<p>Sub-Audit Question 2.3 Does the MoH supply drugs to health centers based on requested quantity and specification of drugs by medical centers?</p>	<p>According to section 4.8 (b) of the National Health Policy on Medical Supplies, MoH is to ensure constant availability of drugs and medical supplies to all citizens.</p>	<p>National Health Policy on Medical Health Supplies</p>

Audit questions and sub-questions	Audit Criteria	Source of Criteria
<p>Sub-Audit Question 3.1 To what extent is the inventory system functional?</p>	<p>According to Revised CMS warehouse SOP finalized, 6.1.1 Inventory Management; Cartons of medical supplies/drugs in warehouse should be appropriately arranged on the racks in a manner that will make the expiry date and batch information labels visible. In addition, the warehouse verification exercise should be Central Medicine Store Standard Operating Procedure Draft Performance Audit Report on Adequate Procurement and Distribution of Medical Supply carried out at least twice in a month to guarantee accuracy of batch information in mSupply. 6.2.2. states that full stock count must be conducted at least once in three months and "first expired/ first out" (FEFO) principle much be followed when stroing and distributing medical supplies/drugs.</p>	<p>Central Medicine Store Standard Operating Procedure</p>
<p>Sub-Audit Question 3.2 What are the measures to ensure adequate implementation of inventory system for the distribution of drugs to health centers?</p>	<p>Revised CMS warehouse SOP finalized, 6.2.2 Inventory Management states that full stock count must be conducted at least once in three months and "first expired/ first out" (FEFO) principle much be followed when stroing and distributing medical supplies/drugs</p>	<p>Central Medicine Store Standard Operating Procedure</p>